Amendments to the Drawings:

The attached replacement and annotated sheets of drawings include changes to Figs. 1-7, 9, 10 and 13-17. The changes to Figs. 1-7, 9, 10 and 13-17 add figure legends. The replacement drawing sheets submitted herewith replace the originally filed drawings and, to the best of the knowledge of the undersigned, include no new matter.

Attachments: **Replacement Sheets** for Figs. 1-17

Annotated Sheets Showing Changes to Figs. 1-17

REMARKS

By the present amendment, Figs. 1-7, 9, 10 and 13-17 have been changed to add legends thereto. Claims 1-63 remain pending in the present application. Claims 1 and 63 are independent claims. Applicant requests reconsideration and allowance in view of the foregoing amendments and the following remarks.

Drawings

1. The drawings are objected to because allegedly every element in Figs. 1-7, 9, 10 and 13-17 allegedly requires reference characters. Applicant has amended Figs. 1-7, 9, 10 and 13-17 by adding legends to clarify the drawings, and, to the best of the knowledge of the undersigned, include no new matter.

Allowed Claims

2. Applicant notes with appreciation the indication by the Office that claims 1-63 are allowed.

Conclusion

3. Applicant believes that a full and complete reply has been made to the outstanding *Ex parte Quayle* Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will

expedite prosecution of this application, the Examiner is hereby invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

April 13, 2006

Respectfully submitted,

By _____

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Registration No. 41,289
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Washington, DC 20043-9998
Attorney/Agent for Applicant

MAS/TCS

Fig.1

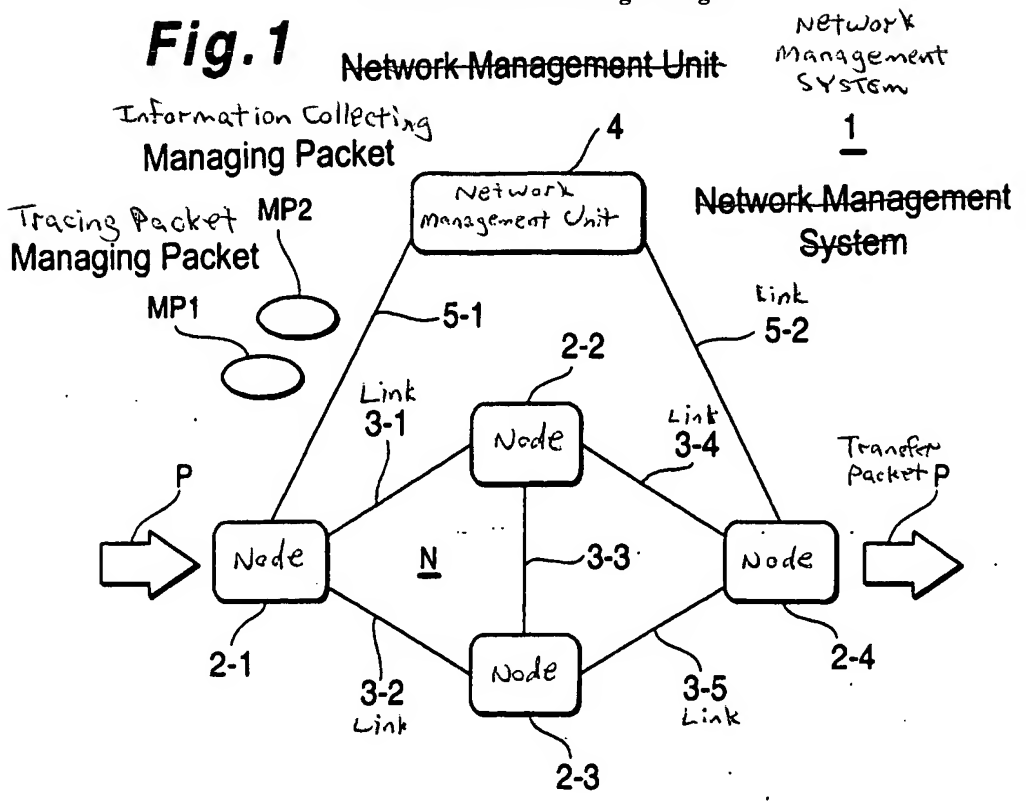
~~Network Management Unit~~
Network Management System
1
Information Collecting Managing Packet
Tracing Packet Managing Packet
MP2
MP1
4
Network Management Unit
5-1
Link 5-2
2-2
Node
Link 3-1
Link 3-4
P
Transfer Packet P
Node
N
3-3
Node
2-1
3-2 Link
Node
3-5 Link
2-4
2-3

Fig.2

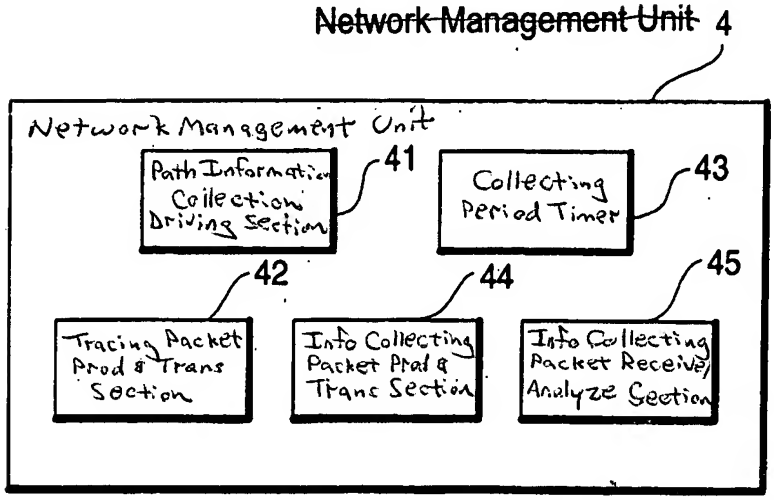
~~Network Management Unit~~ 4
Network Management Unit
Path Information Collection Driving Section
41
Collecting Period Timer
43
42
44
45
Tracing Packet Prod & Trans Section
Info Collecting Packet Prod & Trans Section
Info Collecting Packet Receive/ Analyze Section

Fig.3

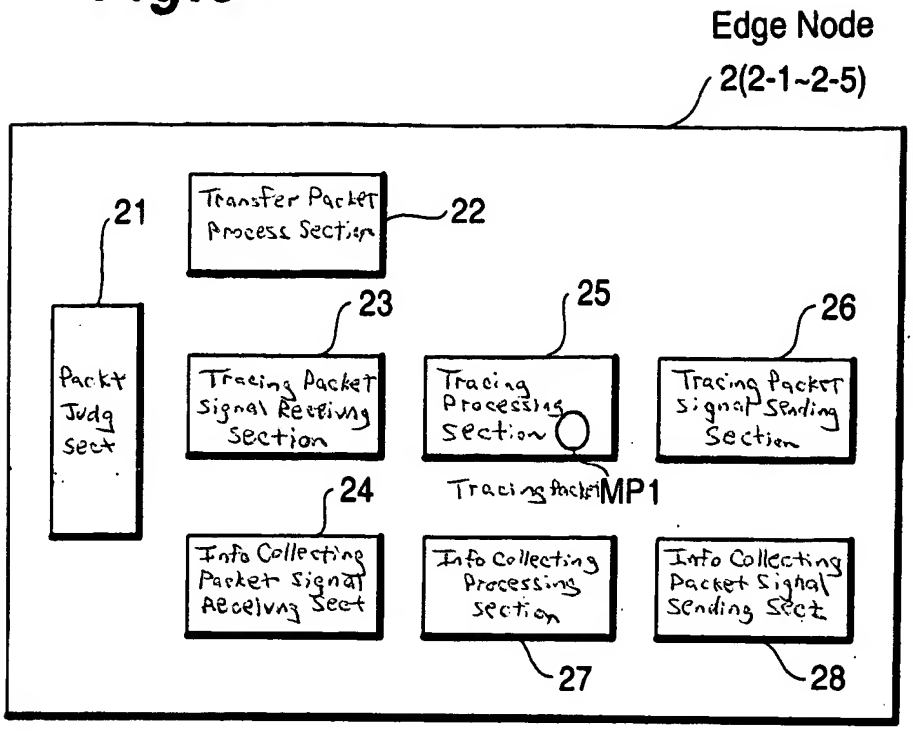
Edge Node
2(2-1~2-5)
21
Transfer Packet Process Section
22
Packt Judg Sect
23
Tracing Packet Signal Receiving Section
25
Tracing Processing Section
Tracing Packet
MP1
26
Tracing Packet Signal Sending Section
24
Info Collecting Packet Signal Receiving Sect
Info Collecting Processing Section
27
Info Collecting Packet Signal Sending Sect
28

Fig.4

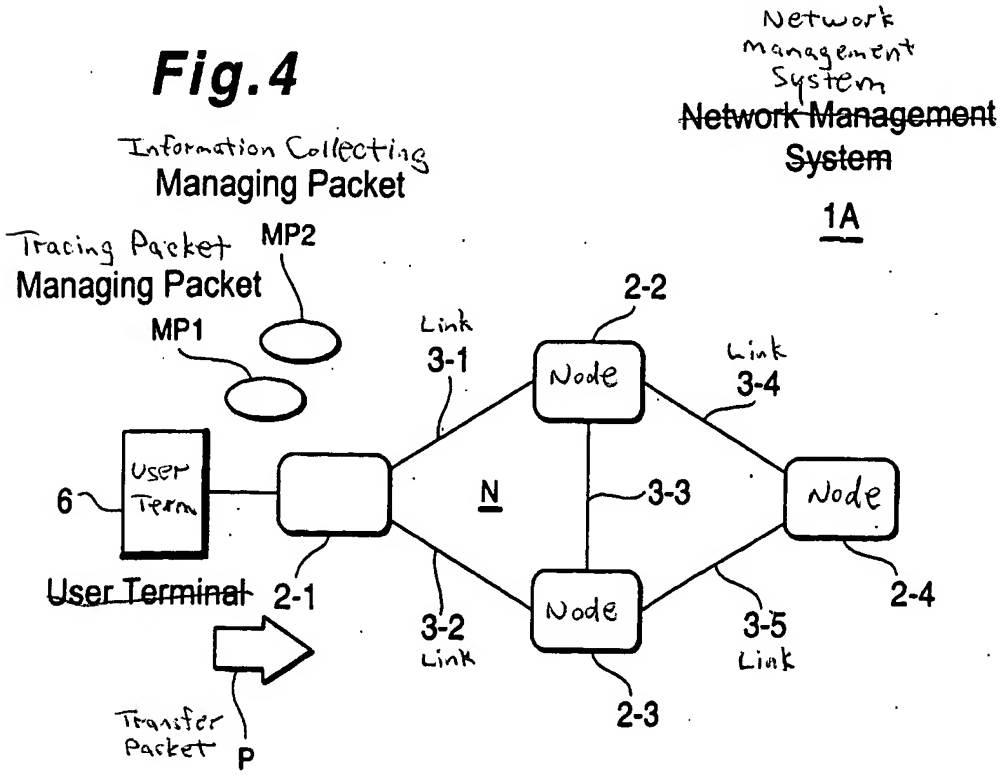
Network Management System
~~Network Management System~~
1A
Information Collecting Managing Packet
Tracing Packet Managing Packet
MP2
MP1
Link 3-1
2-2
Node
Link 3-4
User Term
6
N
3-3
Node
~~User Terminal~~
2-1
3-2 Link
Node
3-5 Link
2-4
2-3
Transfer Packet
P

Fig.5

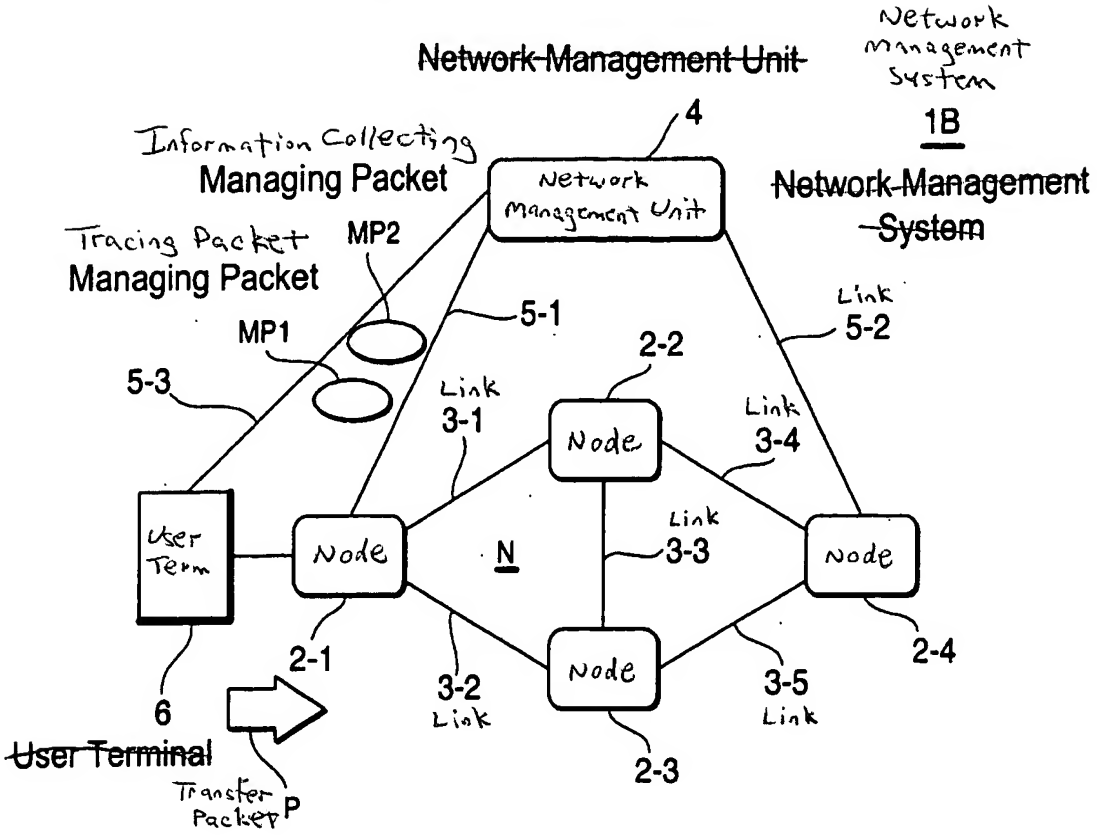
Network Management Unit
Network Management System
1B
Information Collecting Managing Packet
Tracing Packet Managing Packet
MP2
MP1
4
Network Management Unit
Network Management System
5-1
Link 5-2
5-3
2-2
Link 3-1
Node
Link 3-4
User Term
Node
N
Link 3-3
Node
2-1
3-2 Link
Node
3-5 Link
2-4
2-3
6
User Terminal
Transfer Packet P

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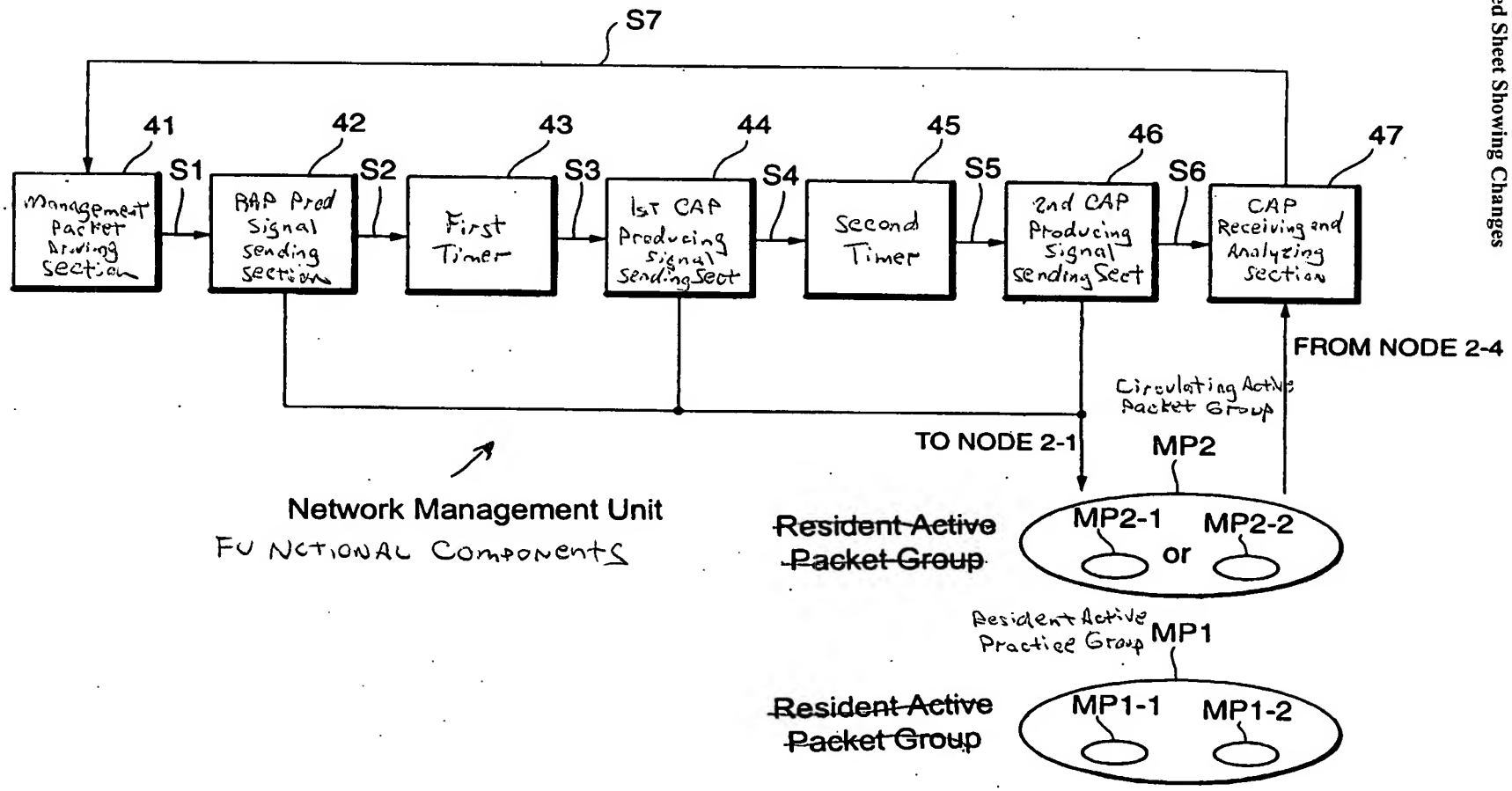
Fig.6



Key

MP1-1: Tracing Processing Packet
MP1-2: QoS Control Packet
MP2-1: Driving Packet
MP2-2: Information Collecting Packet

Fig. 7

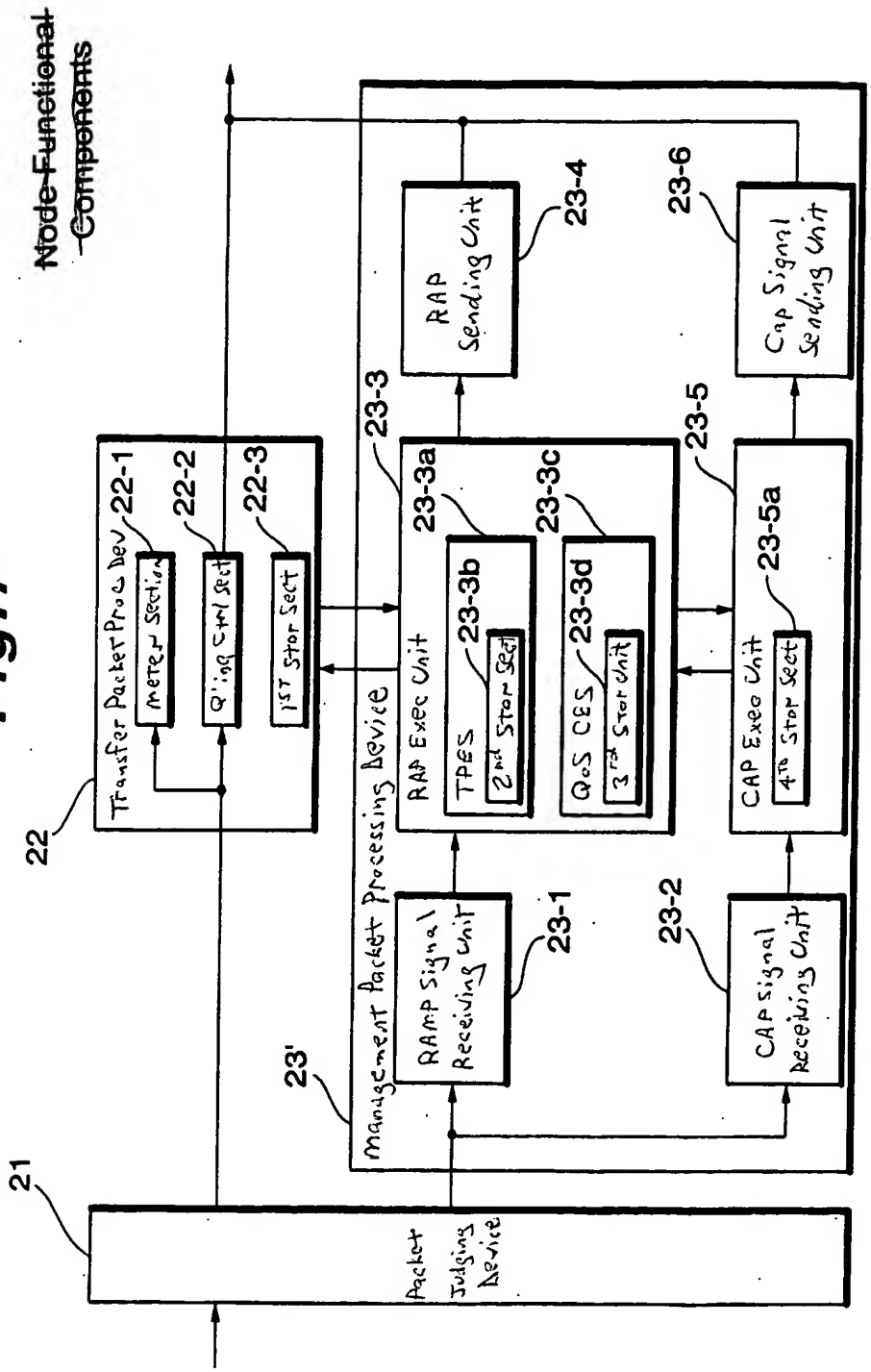
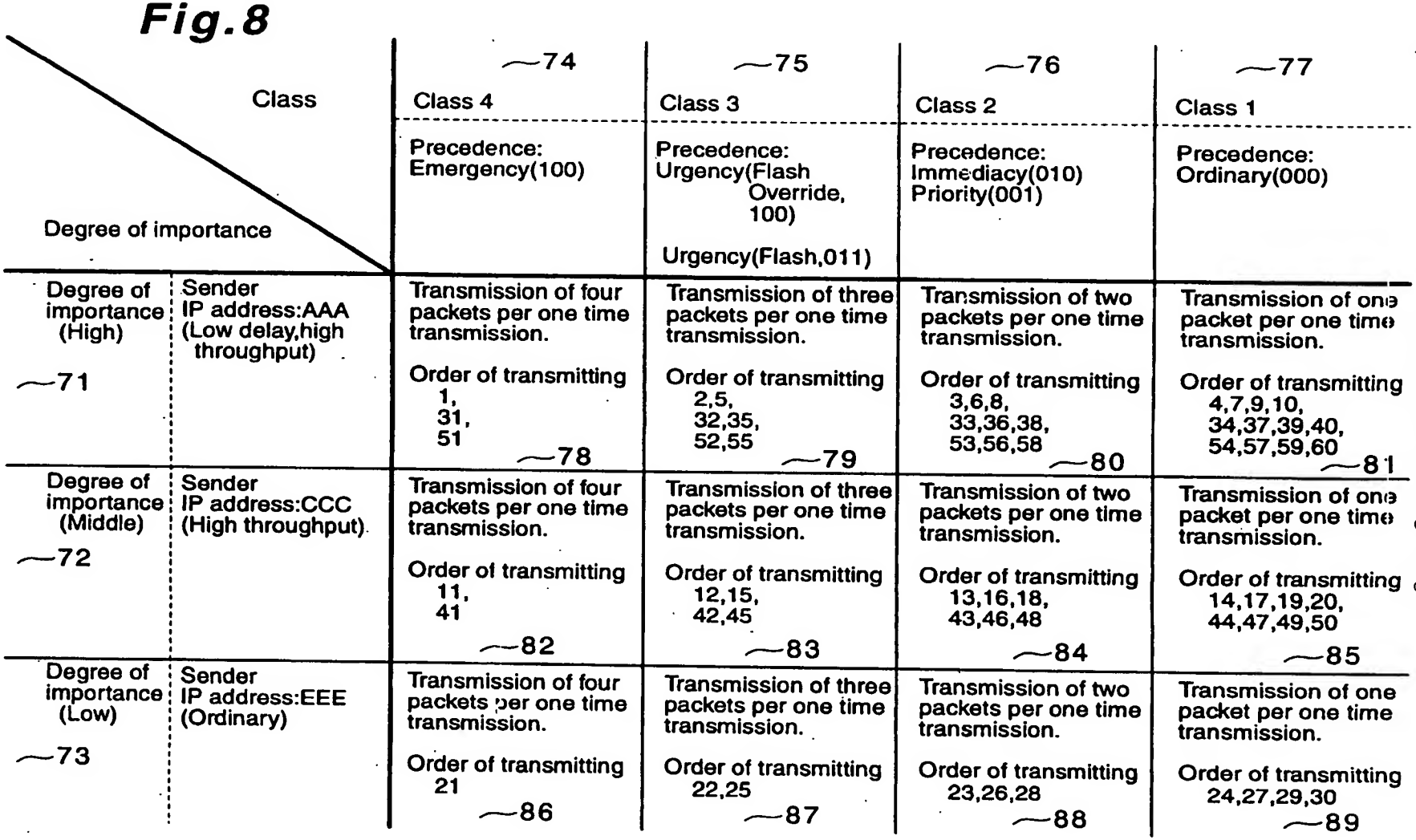

Node Functional Components
Packet Judging Device
21
Management Packet Processing Device
23'
RAMP Signal Receiving Unit
23-1
CAP Signal Receiving Unit
23-2
RAP Exec Unit
23-3
23-3a
TPES
23-3b
2nd Stor Sect
QoS CES
23-3c
23-3d
3rd Stor Unit
RAP Sending Unit
23-4
CAP Exec Unit
23-5
23-5a
4th Stor Sect
Cap Signal Sending Unit
23-6
Transfer Packet Proc Dev
22
22-1
meter Section
22-2
Q'ing Ctrl Sect
22-3
1st Stor Sect

Fig.8



Degree of importance \ Class	~74 Class 4	~75 Class 3	~76 Class 2	~77 Class 1
	Precedence: Emergency(100)	Precedence: Urgency(Flash Override, 100) Urgency(Flash,011)	Precedence: Immediacy(010) Priority(001)	Precedence: Ordinary(000)
Degree of importance (High) ~71 / Sender IP address:AAA (Low delay,high throughput)	Transmission of four packets per one time transmission. Order of transmitting 1, 31, 51 ~78	Transmission of three packets per one time transmission. Order of transmitting 2,5, 32,35, 52,55 ~79	Transmission of two packets per one time transmission. Order of transmitting 3,6,8, 33,36,38, 53,56,58 ~80	Transmission of one packet per one time transmission. Order of transmitting 4,7,9,10, 34,37,39,40, 54,57,59,60 ~81
Degree of importance (Middle) ~72 / Sender IP address:CCC (High throughput)	Transmission of four packets per one time transmission. Order of transmitting 11, 41 ~82	Transmission of three packets per one time transmission. Order of transmitting 12,15, 42,45 ~83	Transmission of two packets per one time transmission. Order of transmitting 13,16,18, 43,46,48 ~84	Transmission of one packet per one time transmission. Order of transmitting 14,17,19,20, 44,47,49,50 ~85
Degree of importance (Low) ~73 / Sender IP address:EEE (Ordinary)	Transmission of four packets per one time transmission. Order of transmitting 21 ~86	Transmission of three packets per one time transmission. Order of transmitting 22,25 ~87	Transmission of two packets per one time transmission. Order of transmitting 23,26,28 ~88	Transmission of one packet per one time transmission. Order of transmitting 24,27,29,30 ~89

~7

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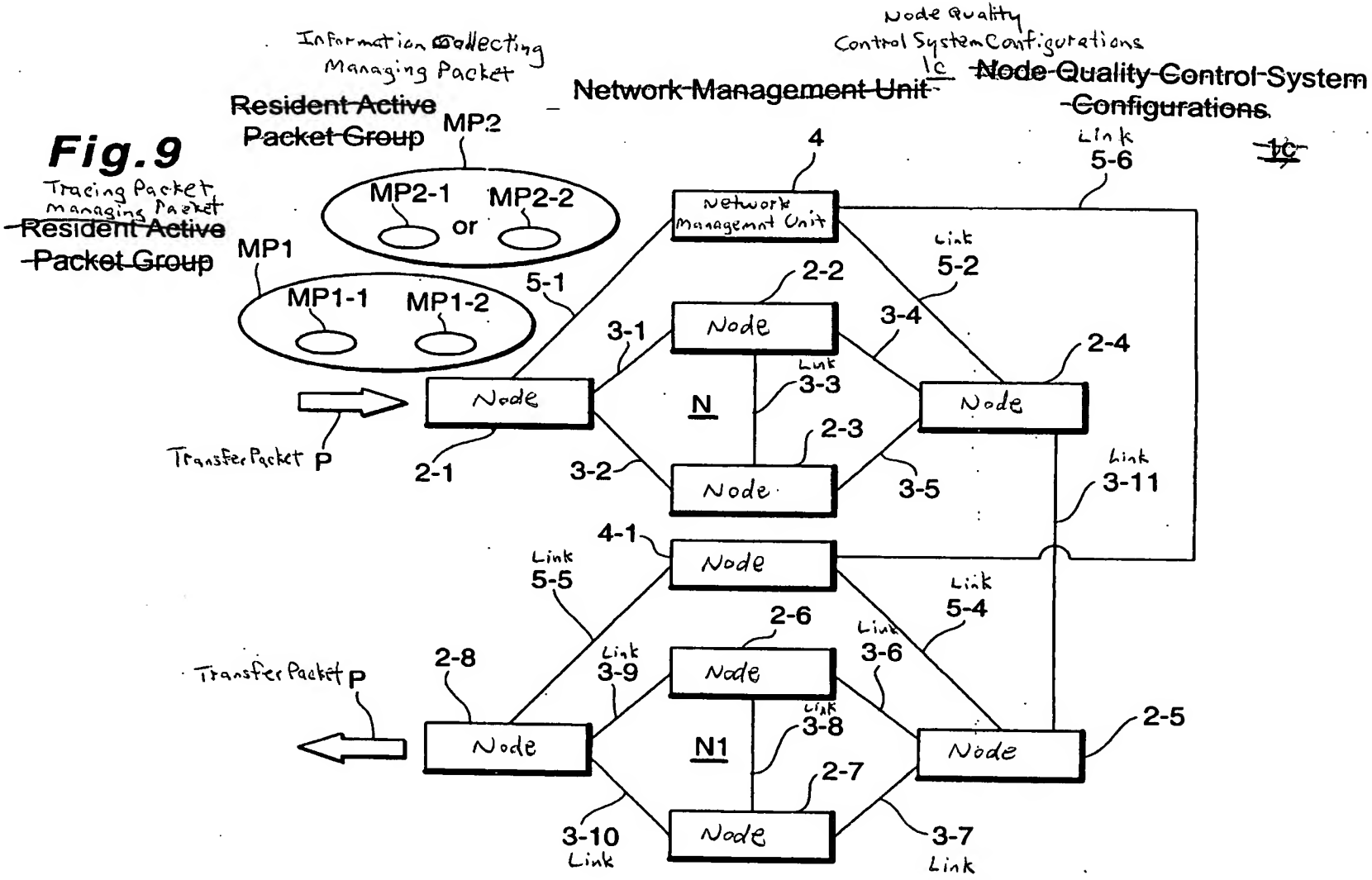
Fig.9



Key

MP1-1: Tracing Processing Packet
MP1-2: Filtering Packet
MP2-1: Tracing Processing Packet
MP2-2: Information Collecting Packet

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Fig. 10

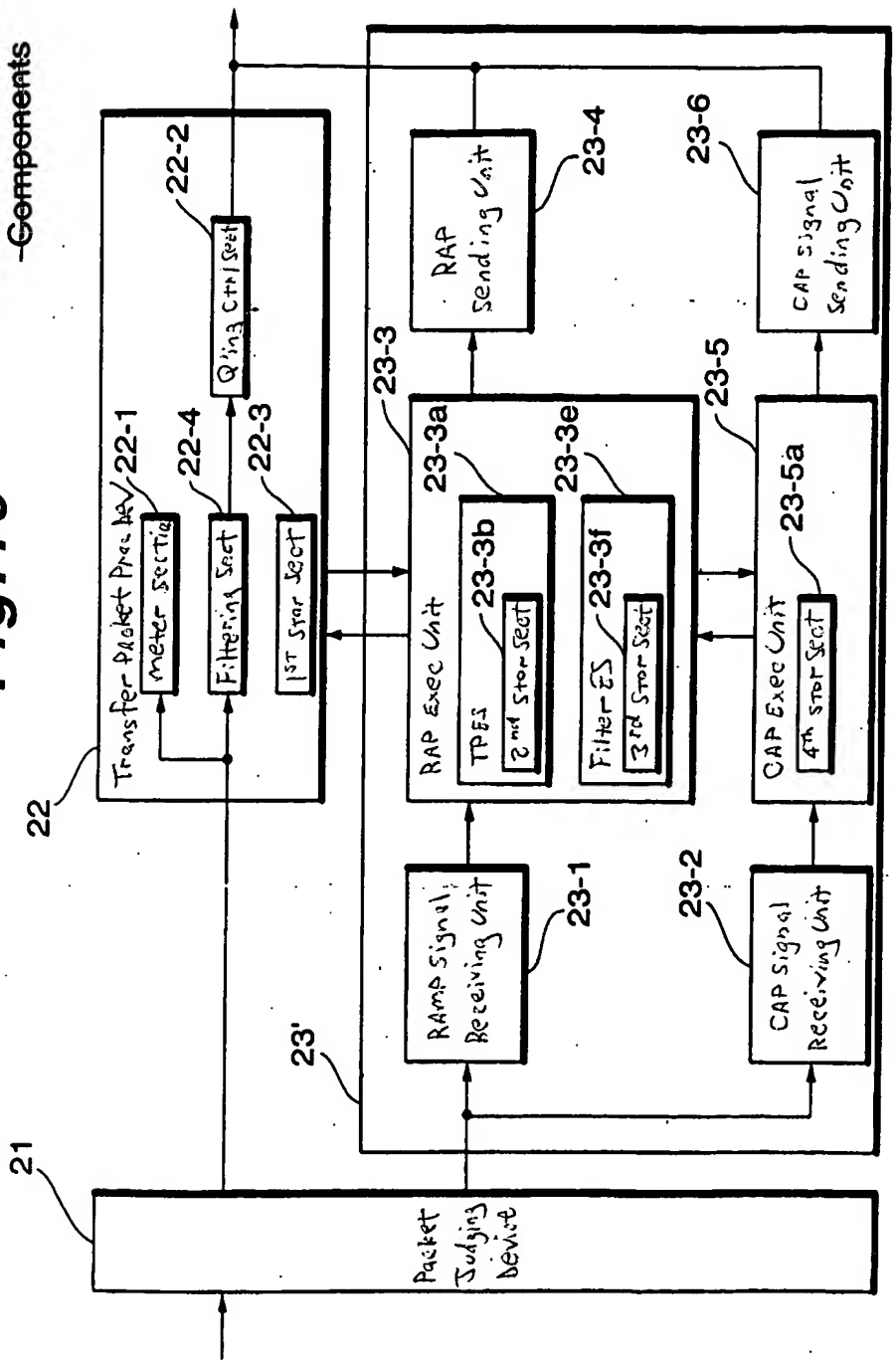
Node Functional Components
Transfer Packet Proc Mo
meter sectio
Filtering Sect
1st Stor Sect
Q'ing Ctrl Sect
RAP Exec Unit
TPEs
2nd Stor Sect
Filter ES
3rd Stor Sect
CAP Exec Unit
4th Stor Sect
RAP sending unit
CAP signal sending Unit
RAMP Signal Receiving Unit
CAP signal Receiving Unit
Packet Judging device
22
22-1
22-2
22-3
22-4
23'
23-1
23-2
23-3
23-3a
23-3b
23-3e
23-3f
23-4
23-5
23-5a
23-6
21

Fig. 11

[Table 7'] ~7'

Value for check item / Check item	Value of check item exceeds maximum threshold value ~72	Value of check item equal to maximum threshold value ~73	Value of check item is minimum threshold value or more and maximum threshold or less ~74	Value of check is minimum threshold value or less ~75
Average use frequency of queuing for transfer packet in node ~71	Transfer packet is abandoned ~71a	Transfer packets are abandoned at designated frequency ~71b	Transfer packets are abandoned depending on values of check item ~71c	Transfer packets are not abandoned ~71d
First option (Above check item + precedence of transfer packet) ~76	All transfer packets are abandoned starting from packet having lower precedence ~76a	Transfer packets are abandoned starting from packet having lower precedence at designated frequency ~76b	Transfer packets are abandoned starting with packet having lower precedence, depending on average frequency of queuing as value of check item ~76c	Not transfer packets are abandoned ~76d
Second option (Average frequency of queuing control section of predetermined transfer packet ~77	All predetermined transfer packets P are abandoned ~77a	Predetermined transfer packet P is abandoned by designated frequency ~77b	Predetermined transfer packet is abandoned depending on value of check item ~77c	No predetermined transfer packet P is abandoned ~77d
Third option (Contents provided in second option + precedence of predetermined transfer packets P) ~78	All packets P having lower precedence are abandoned ~78a	Predetermined transfer packet is abandoned starting with packet having lower precedence with designated frequency ~78b	Predetermined transfer packet P is abandoned starting with packet having lower precedence and depending on value of check item ~78c	No predetermined transfer packet P is abandoned ~78d

Fig. 12

[Table 8]

8

Value for check item / Check item	Value of check item exceeds maximum threshold value ~82	Value of check item equal to maximum threshold value ~83	Value of check item is minimum threshold value or more and maximum threshold or less ~84	Value of check is minimum threshold value or less ~85
Average transmission rate in traffics of transfer packet in node ~81	Transfer packet is abandoned ~81a	Transfer packets are abandoned at designated frequency ~81b	Transfer packets are abandoned depending on values of check item ~81c	Transfer packets are not abandoned ~81d
Fourth option (Above check item + precedence of transfer packet) ~86	All transfer packets are abandoned starting from packet having lower precedence ~86a	Transfer packets are abandoned starting from packet having lower precedence at designated frequency ~86b	Transfer packets are abandoned starting with packet having lower precedence, depending on average frequency of queuing as value of check item ~86c	Not transfer packets are abandoned ~86d
Fifth option (Average transmission rate in traffics of predetermined packet in node) ~87	All predetermined transfer packets P are abandoned ~87a	Predetermined transfer packet P is abandoned by designated frequency ~87b	Predetermined transfer packet is abandoned depending on value of check item ~87c	No predetermined transfer packet P is abandoned ~87d
Sixth option (Fifth option + precedence of predetermined transfer packet P) ~88	All packets P having lower precedence are abandoned ~88a	Predetermined transfer packet is abandoned starting with packet having lower precedence with designated frequency ~88b	Predetermined transfer packet P is abandoned starting with packet having lower precedence and depending on value of check item ~88c	No predetermined transfer packet P is abandoned ~88d

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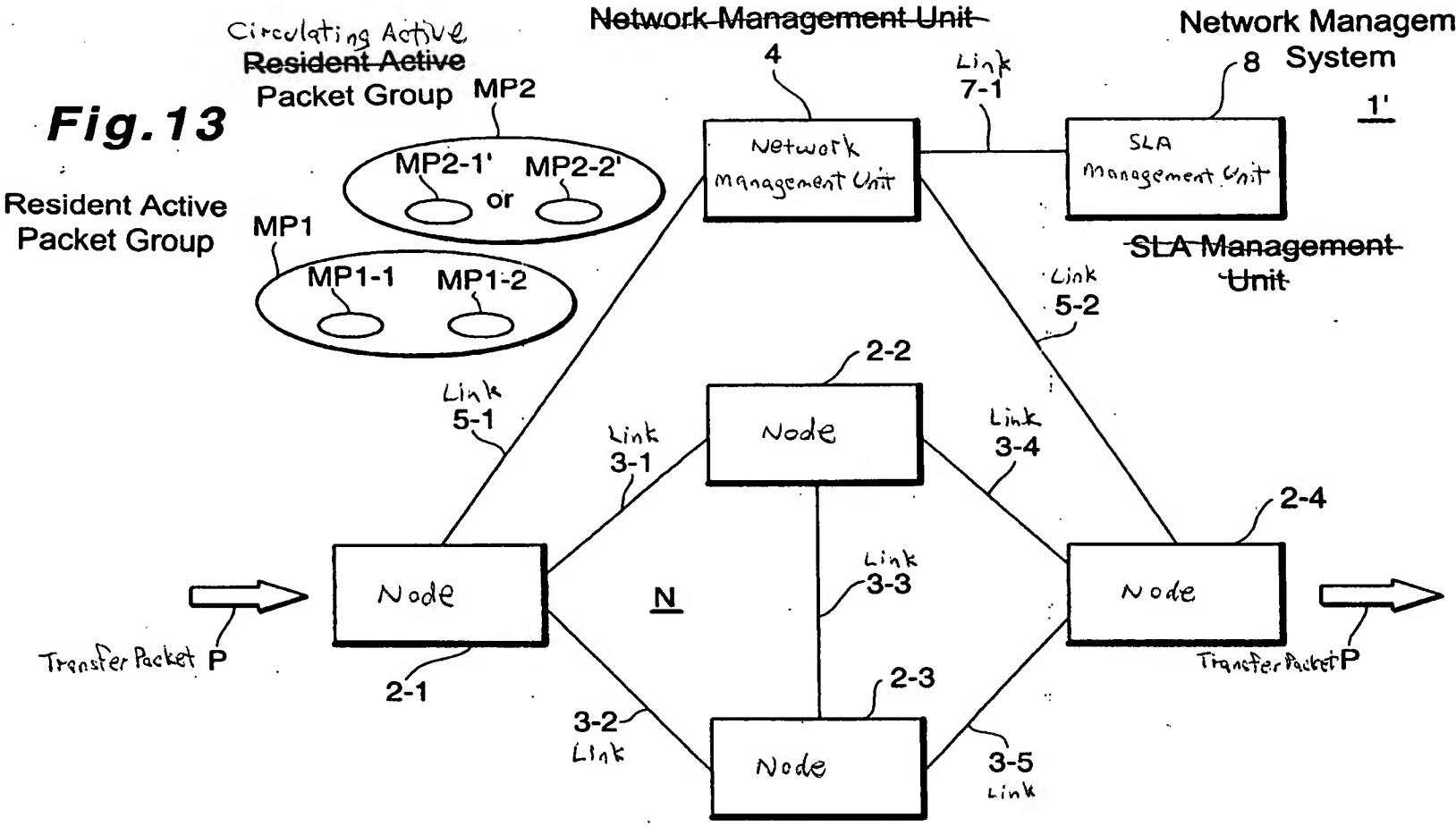
Fig. 13



Key

MP1-1: Tracing Processing Packet
MP1-2: SLA management Packet
MP2-1: Information Collecting Packet
MP2-2: Congestion Avoiding Packet

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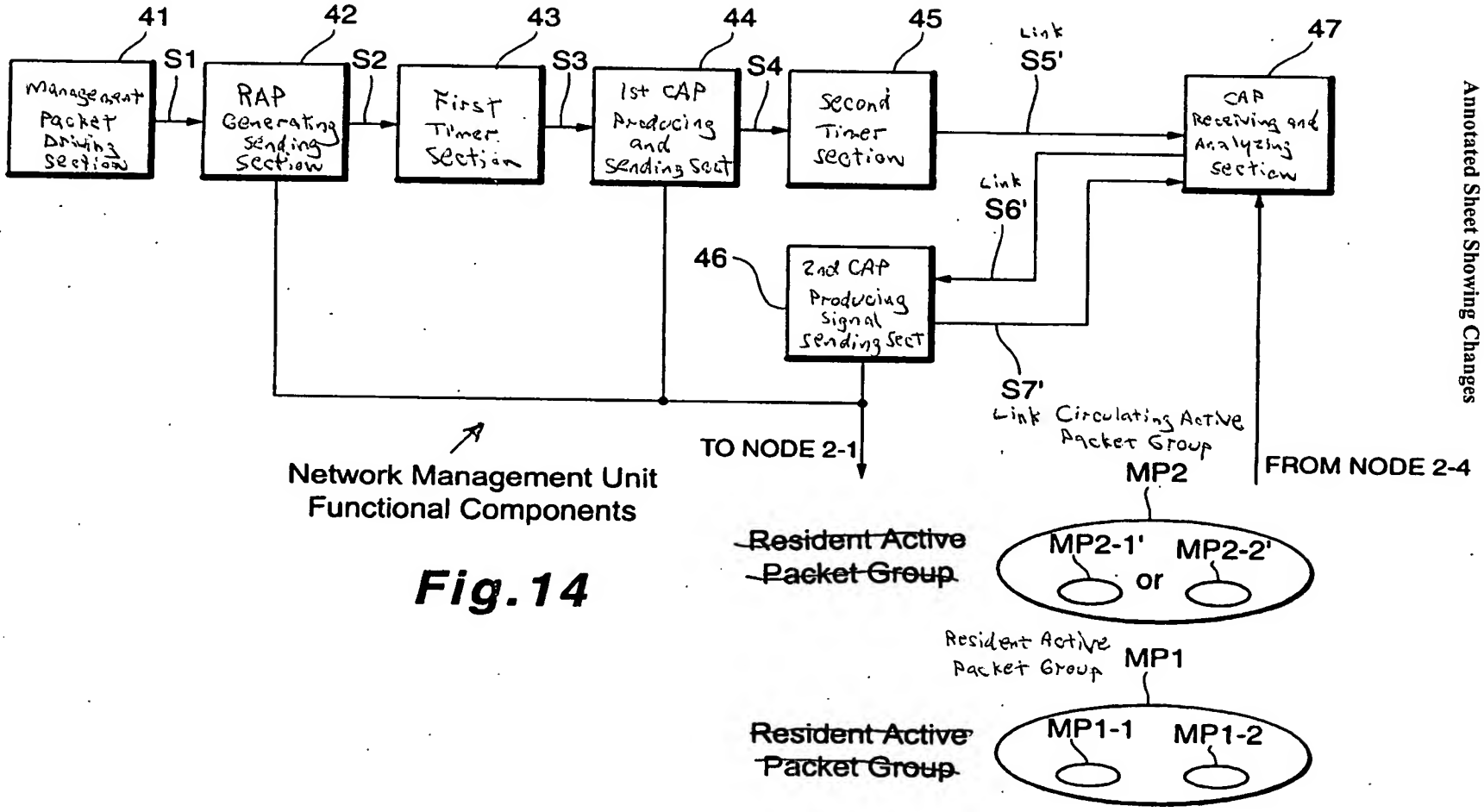
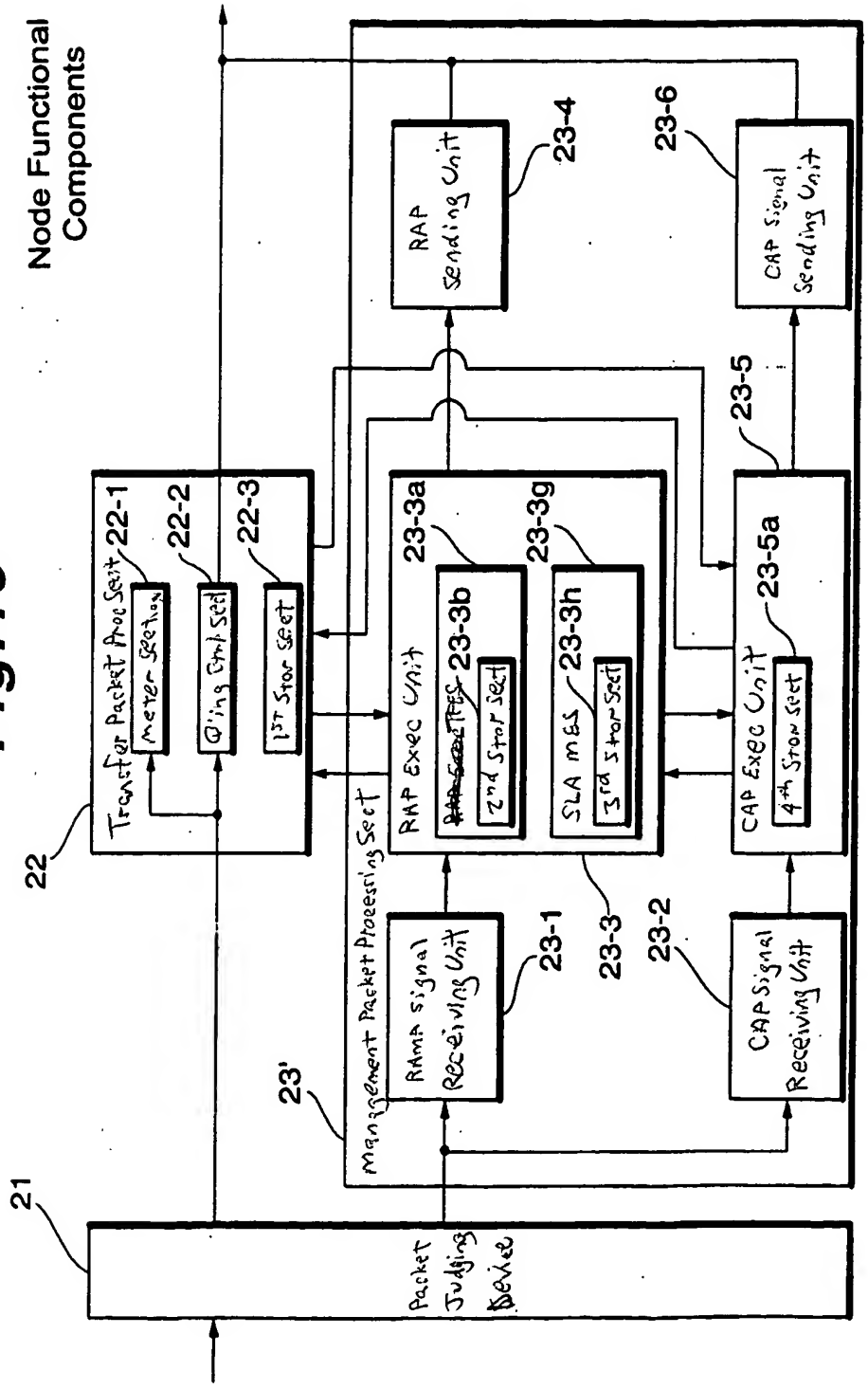


Fig. 14

Key

MP1-1: Tracing Processing Packet
MP1-2: Filtering Packet
MP2-1: Tracing Processing Packet
MP2-2: Information Collecting Packet

Fig. 15


Node Functional Components
RAP sending Unit
23-4
23-6
CAP Signal sending Unit
23-5
22-1
22-2
22-3
23-3a
23-3g
23-5a
Transfer Packet Proc Sect
meter Section
Q'ing Cntl Sect
1st Stor Sect
RAP Exec Unit
23-3b
2nd Stor Sect
SLA mgs
23-3h
3rd Stor Sect
CAP Exec Unit
4th Stor Sect
22
Management Packet Processing Sect
RAP Signal Receiving Unit
23-1
23-3
23-2
CAP Signal Receiving Unit
23'
21
Packet Judging Device

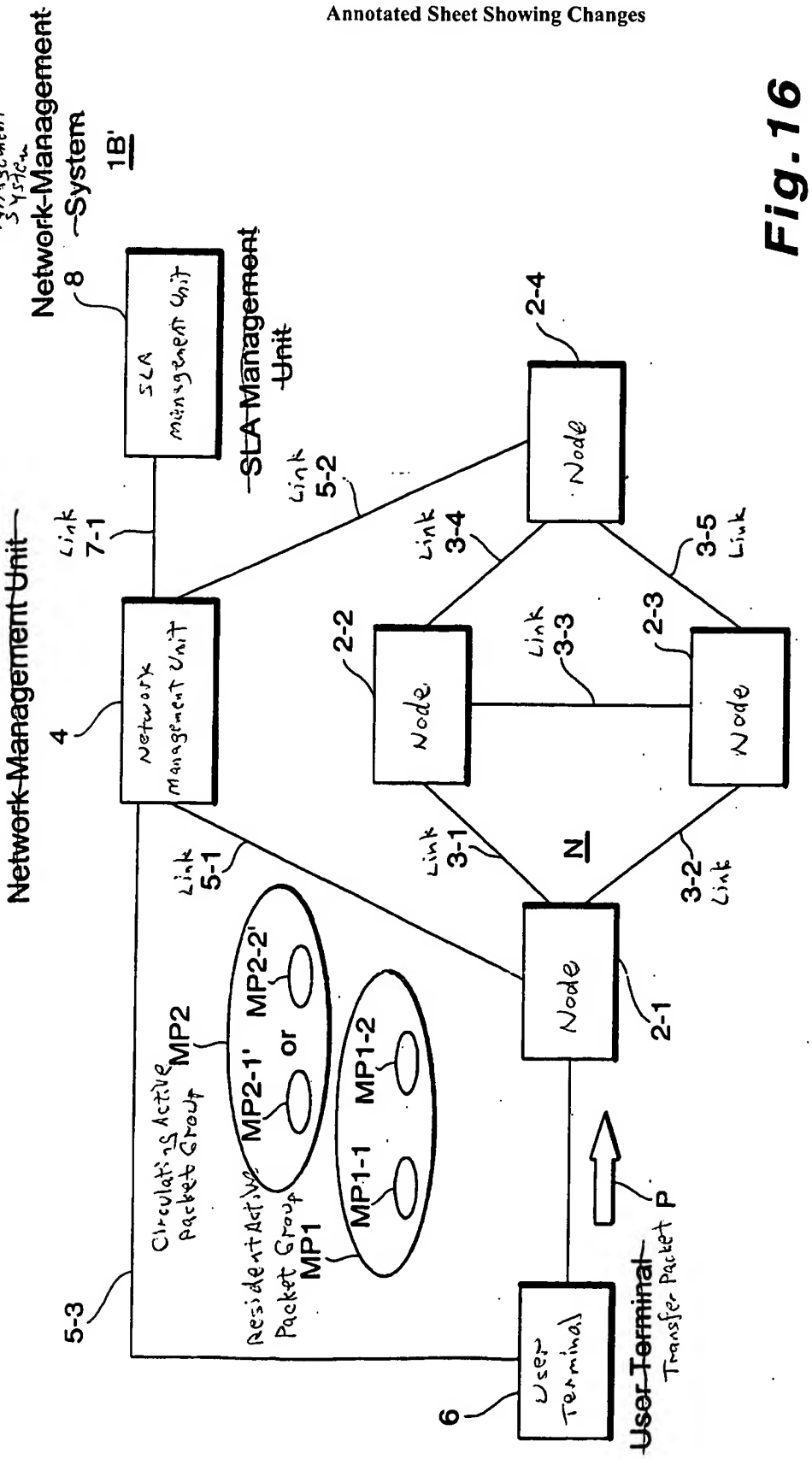
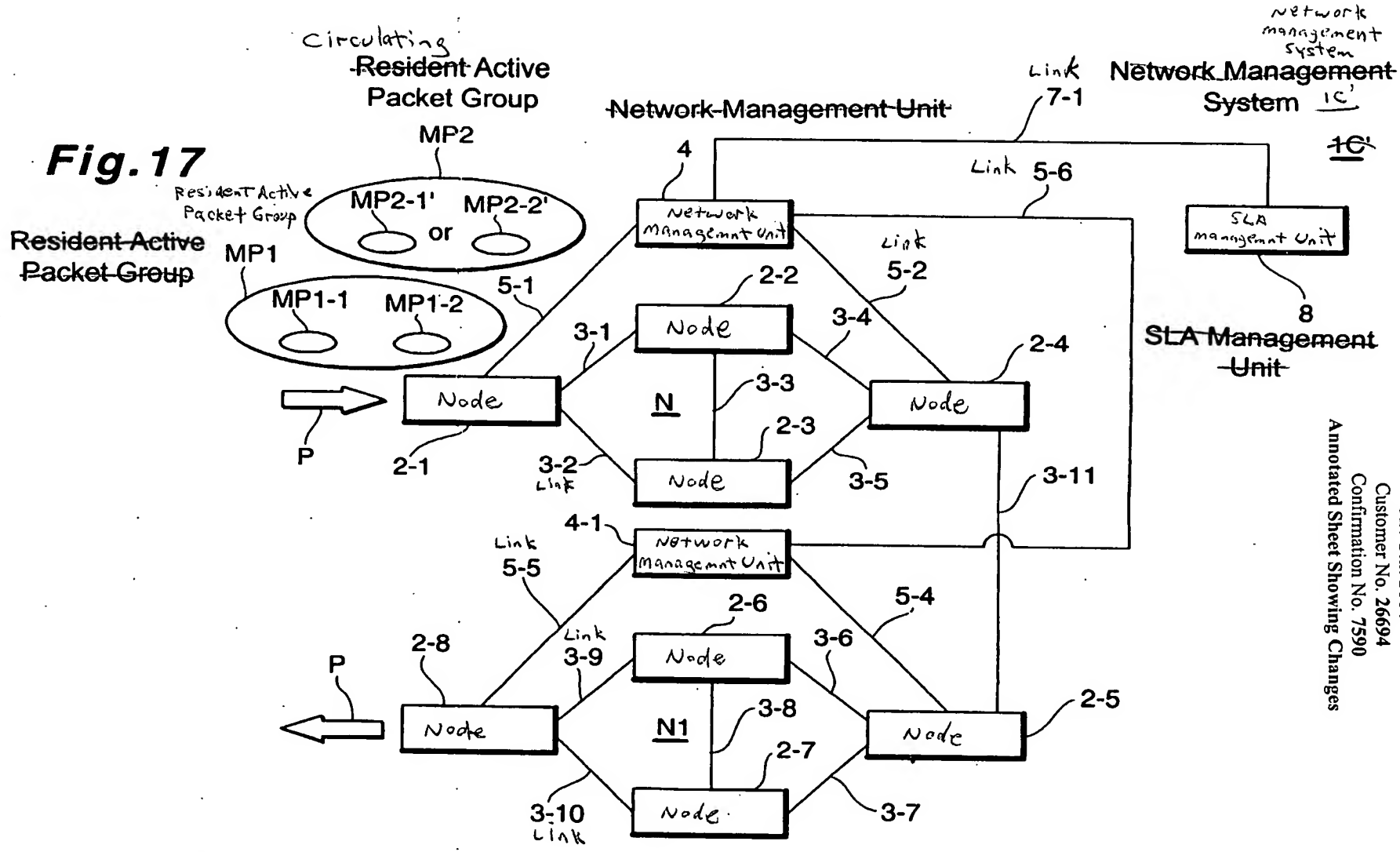


Fig.16

Key
MP1-1: Tracing Processing Packet
MP1-2: SLA management Packet
MP2-1: Information Collecting Packet
MP2-2: Congestion Avoiding Packet

Fig. 17



Key

MP1-1: Tracing Processing Packet
MP1-2: SLA management Packet
MP2-1: Information Collecting Packet
MP2-2: Congestion Avoiding Packet

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Annotated Sheet Showing Changes